## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

ORDER NO. 87-074

WASTE DISCHARGE REQUIREMENTS FOR:

CHEMICAL AND PIGMENT COMPANY PITTSBURG, CONTRA COSTA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter called the Board, finds that:

- The Chemical and Pigment Company, hereinafter called the discharger, manufactures chemical products for agricultural fertilizers and soil amendments. The products consist primarily of zinc based compounds with sulfate, iron sulfate, and ammonium.
- 2. The plant site is located in Pittsburg at 600 Nichols Road. An unnamed ditch adjacent to the west side of the site drains to Suisun Bay. Groundwater is generally encountered between 20 and 45 feet below ground surface. The site consists of clayey soils with lenses and beds of fine grained silty and clayey sands.
- 3. Stormwater runoff, boiler blowdown, water softener solution, sodium hydroxide solution, and process drippings are discharged to a surface impoundment on the plant site as shown on Attachment A. The water in the impoundment is recycled back into process. Sludges in the impoundment are occasionally excavated and stored onsite in bunkers for eventual recycling back into the process. The bunkers are also used to store raw materials, and intermediate process materials.
- 4. The portion of the plant site south of the process area has elevated levels of zinc in the soil. The source of the zinc is from zinc chloride sprayed on the area by the discharger as a weed killer. Also, the discharger stored tank bottom sludges sometime in 1963 or 1964 on a small portion of this area during a temporary plant upset. This sludge material has been removed and returned to the process. This portion of the plant site is listed on the Expenditure Plan for the Hazardous Substance Cleanup Bond Act of 1984. The discharger was ordered by the Contra Costa County Health Services Department in October of 1985 to characterize and conduct any cleanup actions necessary for this area. The discharger has submitted a proposal for the characterization which is currently being reviewed by the County. Storm runoff from this area drains to an unnamed ditch adjacent to the west side of the discharger's property.
- 5. The requirements of Order No. 80-38, adopted on August 5, 1980, govern the discharge to the surface impoundment.
- 5. The discharger is exempt from the regulations contained in Title 23, Chapter 3, Subchapter 15 (Subchapter 15) of the California Administrative Code for the surface impoundment and the storage bunkers

- pursuant to Section 2511(h) of Subchapter 15 which applies to recycling operations.
- 7. Primarily due to its high zinc content, the materials stored and managed in the impoundment and bunkers are hazardous materials. These units pose a threat to water quality.
- 8. The Toxic Pits Cleanup Act of 1984 (TPCA) applies to hazardous waste surface impoundments. The discharger contends that the materials in the impoundment are not a "waste" as defined in the Health and Safety Code (HSC) and the impoundment is therefore not subject to the TPCA. Based on a review of the HSC as summarized below, the Board finds that the discharger is subject to the TPCA.
  - a. Section 25124(b) of the Health and Safety Code (HSC) defines "waste" to include "any recyclable material." Section 25121 of the HSC states that "'recycle' means to use, reuse, or reclaim a hazardous waste or a substance from a hazardous waste, and includes recovery of resources from a hazardous waste". After the effective date of the TPCA, January 1, 1985, the discharger processed waste from bag house fumes which are defined as a hazardous waste in Section 66680(e) of Title 22 of the CAC. Therefore, any activities at the plant associated with the processing of the waste from bag house fumes can be considered to be reclaiming substances from a hazardous waste.
  - b. Section 25143.2(c) of the HSC states that "all the following recyclable materials are subject to the requirements of this chapter which apply to hazardous waste ... (1) ... any material ... used to produce a product that is applied to the land as a fertilizer, soil amendment, agricultural mineral, or an auxiliary soil and plant substance." The surface impoundment, being a part of the facility, was used to recycle waste and is therefore subject to the requirements of the TPCA.
- 9. The TPCA prohibits discharge to hazardous waste surface impoundments which are within one-half mile upgradient of a potential source of drinking water [Section 25208.4(a) of the Health and Safety Code (HSC)]. The discharger has not shown that its impoundment is not within one-half mile upgradient of a potential source of drinking water.
- 10. The TPCA prohibits discharge to hazardous waste surface impoundments which do not meet specified double liner requirements and which do not have adequate groundwater monitoring programs [Section 25208.5(a) of the HSC] on or after January 1, 1989. The discharger's impoundment does not meet specified double liner requirements. The discharger installed three wells in 1983 pursuant to Regional Board staff requests. However, because of inadequate definition of the hydrogeology of the site to support the location of the wells, this system does not constitute an adequate groundwater monitoring program.
- 11. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on December 17, 1986. This Order implements the water quality objectives stated in the Basin Plan.

- 12. The beneficial uses of Suisun Bay in the vicinity of the site are:
  - a. Contact and non-contact water recreation
  - b. Fish migration and spawning
  - c. Wildlife and estuarine habitat
  - d. Preservation of rare and endangered species
  - e. Industrial process supply
  - f. Navigation
  - g. Commercial and sport fishing
- 13. The potential beneficial uses of the groundwater underlying the site are:
  - a. Industrial process water and service supply
  - b. Agricultural supply
- 14. The action to revise waste discharge requirements for continued operation of existing waste management units is exempt from the California Environmental Quality Act (Public Resources Section 2100 et. seq.) in accordance with Section 15301 of the California Administrative Code.
- 15. The Board notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommedations.
- 16. The Board, in a public hearing held on June 17, 1987, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that the discharger and any other persons that own the land or operate the facility shall meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and shall comply with the following:

## A. Prohibition

- 1. The operation of this facility shall not create a condition of pollution or nuisance as defined in Sections 13050 (1) and (m), respectively, of the California Water Code.
- 2. Materials handled and managed at this site shall not be placed in any position where they can be carried from the site into waters of the State.
- 3. Discharge of materials other than those described in Finding 3 to the surface impoundment is prohibited. No wastes generated offsite shall be discharged to the surface impoundment.

## B. Specifications

- 1. Material disposed to the surface impoundment shall be confined within the unit at all times except in the course of liquid return to the process, sludge removal for onsite storage at the bunkers, or waste removal during closure of the unit.
- 2. A minimum freeboard of 2 feet shall be maintained in the impoundment at all times.
- 3. The impoundment shall have facilities adequate to divert surface runoff from adjacent areas, to protect the boundaries of the units from erosion, to prevent conditions that would cause drainage or seepage from the units, and to protect the units from flooding by tidal or storm water. Adequate protection shall be protection from at least a 100-year, 24-hour storm and from the highest tidal stage that may occur during a flood with a 100-year return period.
- 4. The impoundment shall not be located within one-half mile upgradient of a potential source of drinking water as defined in Section 25208.2(s) of the HSC.
- 5. The impoundment shall be double lined. Both liners shall be designed, operated, and constructed of materials to prevent the migration of wastes out of the impoundment to the adjacent subsurface soil or groundwater or surface water at anytime during the period the facility remains in operation.
- 6. The impoundment shall be equipped with a blanket type leachate collection and removal system between the liners.
- 7. The discharger shall conduct groundwater monitoring of the impoundment in accordance with Section 25208.5(a) of the HSC.

## C. Provisions

- 1. The discharger shall comply with Specifications B.1., 2., and 3. upon adoption of this Order. Compliance with Specification B.4., 5., 6., and 7. shall be in accordance with the following tasks and time schedule:
  - a. Submit a Hydrogeological Assessment Report (HAR) in accordance with Section 25208.8 of the Health and Safety Code satisfactory to the Executive Officer. The HAR must be capable of identifying any potential source of drinking water within one-half mile downgradient of the impoundment.

    REPORT DUE: November 30, 1987
  - b. Remove all liquid hazardous material or hazardous material containing free liquids from the existing surface impoundment by January 1, 1989, or by June 30, 1988, if it is shown pursuant to Provision C.l.a. that the existing impoundment is within one-half mile upgradient of a potential source of drinking water.

- c. Submit a proposal for a groundwater monitoring program for the impoundment and a plan and time schedule for implementing the program.

  REPORT DUE: February 29, 1988.
- d. Implement a groundwater monitoring program as approved by the Executive Officer in accordance with the approved proposal and time schedule submitted for Task 1.c.
- e. Full compliance with Specification B.4. by July 1, 1988.
- f. Full compliance with Specifications B.5., 6., and 7. by January 1, 1989.
- 2. Reports pursuant to compliance with the prohibitions, specifications, or provisions of this Order shall be prepared under the supervision of a registered engineer or certified engineering geologist.
- 3. The discharger shall remove and relocate any wastes which are discharged at this site in violation of these requirements.
- 4. The discharger shall file with this Board a report of any material change or proposed change in the character, location, or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries, contours, or ownership of the disposal areas.
- 5. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.
- 6. The Board considers the property owner and site operator to have a continuing responsibility for correcting any problems within their reasonable control which arise in the future as a result of this waste discharge or water applied to this property during subsequent use of the land for other purposes.
- 7. The discharger shall comply with any amendments to the groundwater monitoring program as directed by the Executive Officer.
- 8. The discharger shall permit the Board:
  - a. entry upon premises on which wastes are located or in which any required records are kept;
  - b. access to copy any records required to be kept under terms and conditions of this Order;
  - c. inspection of monitoring equipment or records; and
  - d. sampling of any discharge.

- 9. These requirements do not authorize commission of any act causing injury to the property of another or of the public, do not convey any property rights, do not remove liability under federal, state, or local laws, and do not authorized the discharge of waste withour appropriate federal, state, or local permits, authorizations, or determinations.
- 10. This Order supercedes Order No. 80-38. Order No. 80-38 is hereby rescinded.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on June 17, 1987.

ROGER B. JAMES Executive Officer

Attachments:

Attachment A - Site Map

